

**CLAIMS**

What is claimed:

1. A system for capturing and recording audio and video signals in real time,  
2. said system comprising:
  3. at least one video decoding means for receiving video signals;
  4. at least one video encoding means coupled to said video decoding means for receiving therefrom said video signals, said video signals being encoded into a predetermined format;
  5. at least one audio converting means for receiving audio signals;
  6. at least one signal processing means coupled to said video encoding means and said audio converting means for receiving therefrom formatted video signals and audio signals;
  7. at least one controller means coupled to said signal processing means for receiving therefrom composite audio and video signals, said controller means further receiving audio and video signals;
  8. at least one optical recording means coupled to said signal processing means and said controller means for receiving and recording said composite audio and video signals on optical storage media, said optical recording means communicating with said signal processing means over said controller means,
  9. whereby said system records audio and video signals in real time and without a host processor and memory overhead.
2. A method for capturing and recording audio and video signals in real time,  
1. said method comprising the steps of:
  3. capturing video signals with at least one video decoding means;
  - 4.

6       formatting said video signals with at least one video encoding means  
7       coupled to said video decoding means, said video signals being  
8       encoded into a predetermined format;  
9  
10      capturing audio signals with at least one audio converting means;  
11  
12      receiving formatted video signals and audio signals from at least one  
13       signal processing means coupled to said video encoding means and  
14       said audio converting means;  
15  
16      receiving composite audio and video signals from at least one controller  
17       means, said controller means further receiving audio and video signals;  
18  
19      receiving and recording said composite audio and video signals on  
20       optical storage media with at least one optical recording means coupled  
21       to said signal processing means and said controller means, said optical  
22       recording means communicating with said signal processing means over  
23       said processing means,  
24  
25      whereby said method records audio and video signals in real time and  
26       without a host processor and memory overhead.  
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1       3. A method for coordinating the transmission and recording of compressed  
2       audio and video data on optical storage media with an audio optical  
3       recording means in a system for capturing and recording of audio and video  
4       data in real time, said system comprising at least one video encoding  
5       means, an audio encoding means, and a controller means, said method  
6       comprising the steps of:  
7  
8       preparing said audio optical recording means for recording by  
9       requesting with said controller means for a synchronization signal  
10       therefrom;  
11  
12       configuring said audio encoding means and said video encoding means  
13       with said controller means by inserting variable link and pregap length,  
14       front and back margins in formatting MPEG tracks;

15 monitoring said audio optical recording means with said controller means  
16 for the return of said synchronization signal before activating the  
17 recording function of said audio optical recording means after a first  
18 predetermined delay;

19

20 releasing said audio encoding means and said video encoding means to  
21 transfer compressed audio and video data to said audio optical  
22 recording means after a second predetermined delay,

23

24 whereby said method actualizes the real time recording of compressed  
25 audio and video data on optical storage media with an audio optical  
26 recording means without memory overhead and synchronization of data  
27 transfer being controlled intelligently by the adjustment of variable link  
28 and pregap length in MPEG tracks.

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